Intramural Research

## Highlights

## Hospital Cost and Utilization Project

#### Agency for Health Care Policy and Research

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# Statistics on Diagnoses and Procedures for Blacks in U.S. Hospitals

#### In Brief:

- National statistics on U.S. hospitalizations in 1986 indicate that blacks were more likely than other racial and ethnic groups to be hospitalized for diagnoses that might reflect poor primary care, including diabetes with complications, asthma, and convulsions.
- Black women had disproportionately high rates of hospitalization for fetal distress, threatened premature labor, and spontaneous abortion, all of which may reflect inadequate prenatal care.
- Blacks accounted for a disproportionately low percentage of patients receiving some of the most expensive frequently performed medical and surgical procedures, indicating that they may lack access to such high-cost care.

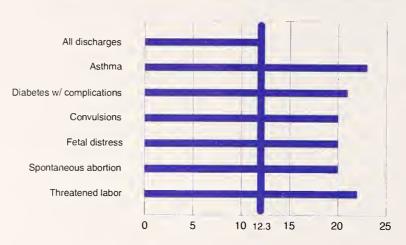
#### Background

Ensuring access to health care for minority populations is an important health policy concern. National data on health care received by different racial and ethnic groups is included in a report describing hospital discharges in the 50 most frequent diagnosis-related groups (DRGs), diagnoses, and procedures in 1986.

The statistics for that year are based on all 1986 discharges from approximately 60 percent of the hospitals participating in the second Hospital Cost and Utilization Project (HCUP-2), a database that includes patient discharge records from approximately 500 community hospitals nationwide from 1980 to 1987. The discharge

Figure 1

Blacks as a Percentage of Hospital Patients with Selected Diagnoses, 1986\*



<sup>\*</sup>In hospitals in the HCUP-2 60-percent sample

Blacks represented 12.3 percent of all hospital patients but were more likely to be hospitalized for conditions indicating poor primary care.

data distinguish among four classes of hospitals (small rural, large rural, small urban, and large urban) and discharge information includes patient's age, gender, racial and ethnic origin, length of stay, charges, pay source, and discharge status.

#### Selected Findings

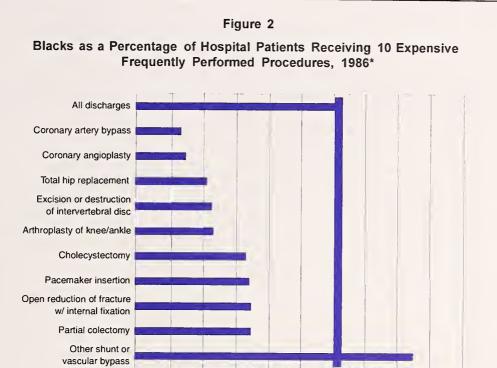
## Diagnoses with Disproportionately High Percentages of Blacks

While blacks represented 12.3 percent of all hospital patients, they were disproportionately represented in hospitalizations for asthma (22.9 percent), diabetes with complications (21.3 percent), and convulsions (20.2 percent) (Figure 1). These hospitalizations may indicate poor followup and continuity of care for conditions that should be manageable on an outpatient basis. Black women, who accounted for 15.5 percent of single liveborns, were disproportionately represented in hospitalizations

for fetal distress (20.2 percent), threatened premature labor (22.1 percent), and spontaneous abortion (20.1 percent). These conditions all may indicate inadequate prenatal care.

#### High-Cost Procedures with Disproportionately Low Percentages of Blacks

Blacks were underrepresented when it came to hospitalizations for high-cost procedures (any procedure with a hospital bill at or above the 75th percentile—\$4,579—of charges for all hospital stays). Ten such high-cost procedures were among the 50 most frequently performed procedures. Of these 10 (Figure 2), 9 had low percentages of black patients (7 percent or less): coronary artery bypass (2.7 percent), coronary angioplasty (3.0 percent), total hip replacement (4.3 percent), excision or destruction of intervertebral disc (4.6 percent), arthroplasty of knee and ankle (4.7 percent), cholecystectomy (6.7 percent), pacemaker insertion (6.9 percent), open reduction of fracture with internal



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\*In hospitals in the HCUP-2 60-percent sample

Blacks were less likely to receive 9 out of 10 expensive frequently performed procedures.

fixation (7.0 percent), and partial colectomy (7.0 percent). On the other hand, a disproportionately high percentage of patients undergoing shunt or vascular bypass of noncoronary vessels were black (16.9 percent).

#### **Implications**

While race-related differences in the prevalence of disease may lead to disparities in the use of medical care, the data indicate that blacks may lack access to high-cost medical and surgical procedures and that poor primary care among blacks may cause high rates of hospitalization for certain conditions. In addition, the high rate of fetal distress and other pregnancy complications may reflect inadequate prenatal care and could have immediate as well as long-term complications for the newborn.

While the data raise interesting policy issues and research questions about how hospital services are provided in the United States, descriptive statistics alone cannot explain different patterns of medical care or determine their appropriateness. A variety of factors may contribute to differences in the use of hospital services across groups of patients, diseases, or hospitals. Such factors include the prevalence of disease in a population, the severity of illness, the available technology, physician training and skills, and financial constraints. Because the examination of health policy questions often requires a specific analytical approach and indepth research, the findings highlighted here are intended only as informed speculation to stimulate thought and discussion and serve as a starting point for research.

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This issue of *Intramural Research Highlights* is based on the following publication:

Lemrow, N., D. Adams, R. Coffey, and D. Farley. (1990, September). The 50 most frequent diagnosis-related groups (DRGs), diagnoses, and procedures: Statistics by hospital size and location. (DHHS Publication No. (PHS) 90-3465). Hospital Studies Program Research Note 13, Agency for Health Care Policy and Research. Rockville, MD: Public Health Service.

For further information on the subject of this issue, please call the Division of Provider Studies, (301) 594–1410.